

## 41. Дилетанты из "Лунной программы" против кинооператора Л.Коновалова.

8-10 minutes

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I read very little of what the Lunnaya Program channel writes. I don't find anything interesting there. But this time, at the end of January (2021), an article dedicated to me ("How Leonid Konovalov" exposes the "Apollo program") began to appear annoyingly for three days in a row in my feed. And I read it.

This channel, Lunar Program, appeared about a year ago, after I published three articles on Yandex-Zen in February 2020 about the fact that Americans have never been to the Moon. From the point of view of the cameraman, I analyzed some of the "moon" pictures and videos and came to the conclusion that they were all clearly filmed in the pavilion. And then this channel arose - "Lunar Program". They devoted their very [first article](#) to exposing some of Konovalov's evidence. Such a simple naive article, which does not prove or expose anything. In response, I analyzed in detail the indicated photograph from the Apollo 15 mission and told how similar pictures were taken nearby - the astronaut was filmed in the pavilion against the backdrop of a huge (32 or 33 meters wide) movie screen, onto which the lunar mountain was projected. Since in my article, in addition to photographs from the Apollo 15 mission, I brought similar photographs from the Apollo 16 and Apollo 17 missions, the result was a response article entitled "[The Americans filmed all the moon landings in the same pavilion](#) . "

This time, too, the "Lunar Program" opposed Konovalov. Judging by the screen shot of my article (and it was made in September 2020), it took the "Lunar Program" more than 4 months to find objections to my arguments.



Лунная программа

1457 подписчиков

Подписаться



## Как Леонид Коновалов "разоблачает" американскую программу Аполлон

26 января 2,3 тыс. дочитываний 6 мин.



Кинооператор рассказывает

1145 подписчиков

Подписаться



### 25. Самая известная лунная фотография из миссии "Аполлон-15" снята в павильоне методом фронтпроекции

12 сентября 2020 339 дочитываний 6 мин.

Внимательные наблюдатели уже давно подметили такую особенность многих "лунных" снимков - на них фон с лунным пейзажем отделён от переднеплановых объектов чёткой границей. Особенно это заметно на фотографии из миссии "Аполлон-15", которая часто используется для иллюстрации статей на "лунную" тематику.

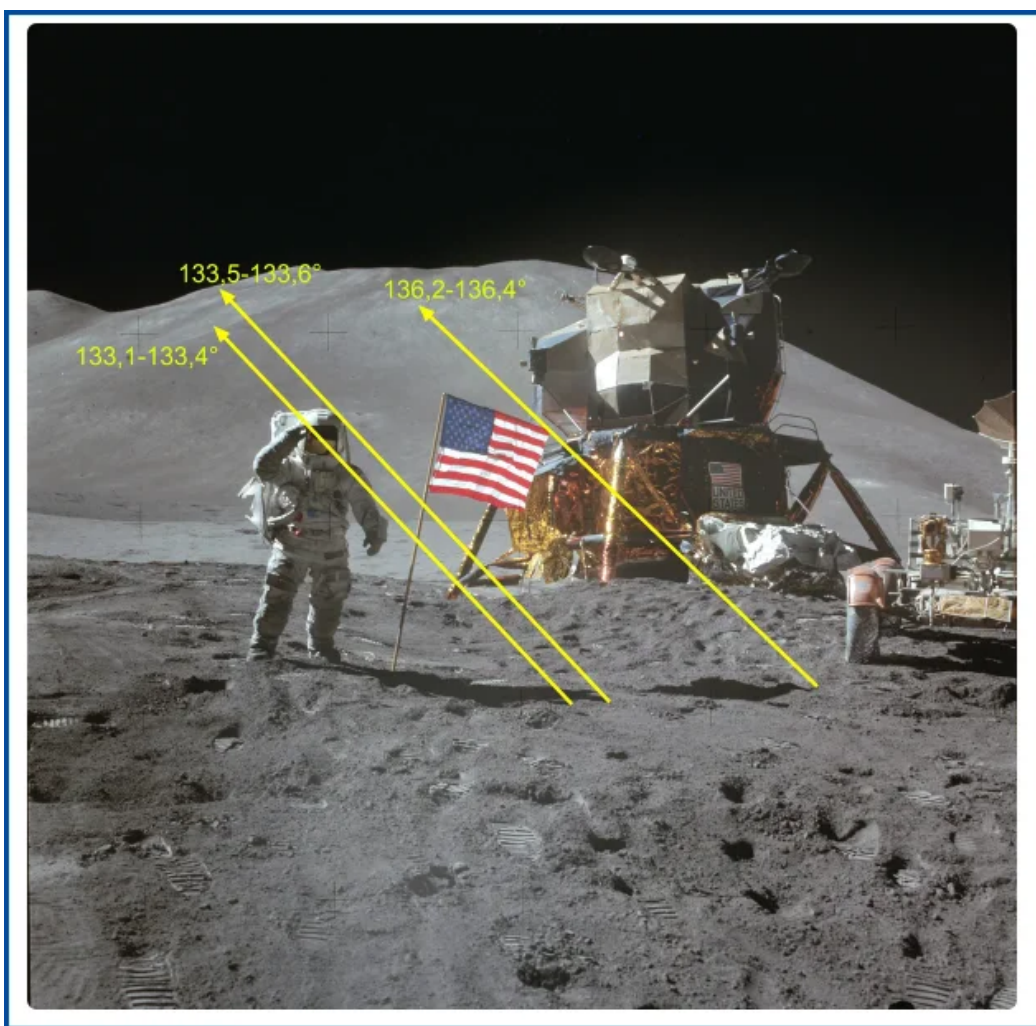


It seemed to the authors of this channel that they were able to find serious objections to the version of the cameraman Konovalov that the "lunar" shots were filmed in the pavilion. But all their arguments look naive and are easily refuted by practice. People far from cinema (I mean the authors of the "Lunar Program"), in their January (2021) article "[How Leonid Konovalov](#)" exposes the "Apollo program" began to SUPPOSE where the lighting devices can be located and how circular panoramas are made at film studios. But these are only **assumptions of** people who do not know how to make a movie. They have entered the area where they are amateurs. We'll have to tell them how they actually work in Hollywood, and how a space movie is made.

## The first argument of the "Lunar Program"

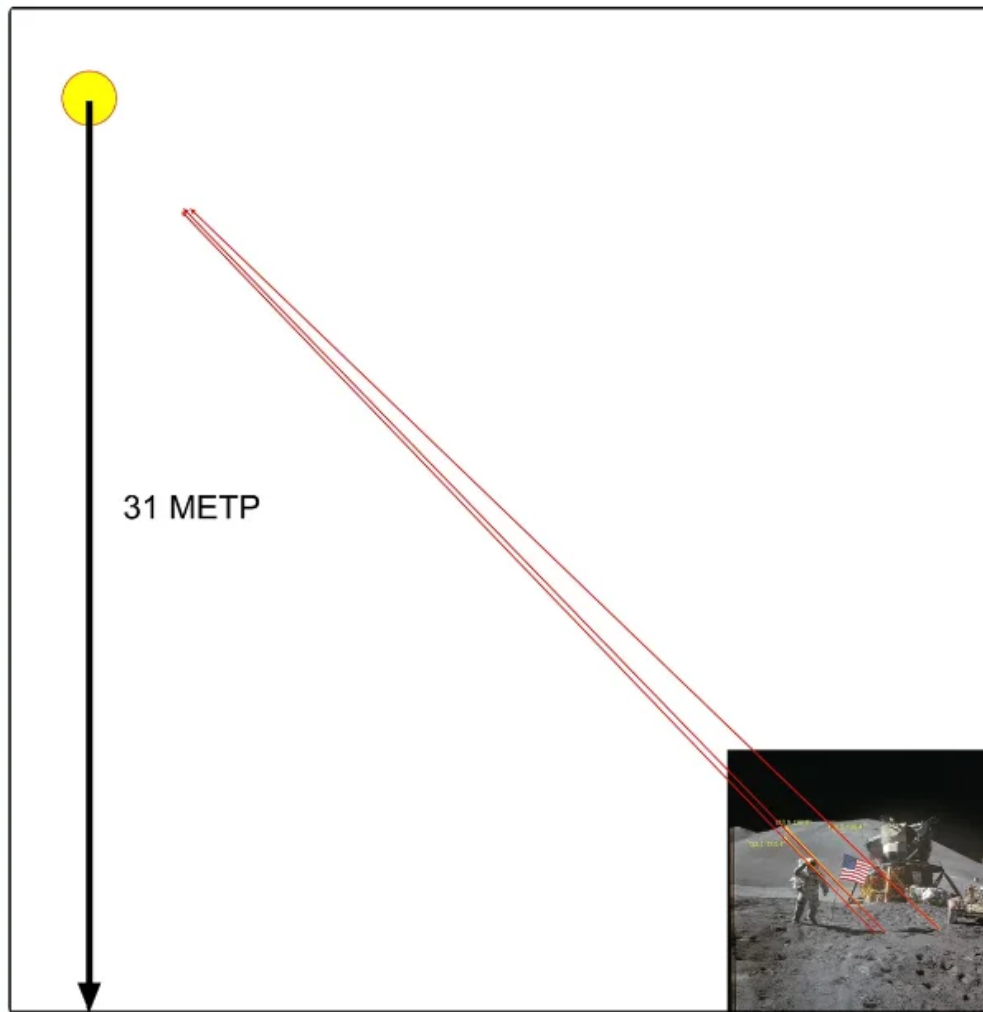
(We will quote a few lines of text and take two pictures from there.)

*We have a standing astronaut, a raised hand and a flag. They all cast shadows. This means that we can see where the light source is. If this is a studio, then we can get an idea of the ceiling height.*



The first picture from the cited article.

Так где должен располагаться источник света? На какой высоте?



Вы можете себе представить студию, у которой потолок находится на высоте 12-этажного дома? Я не могу.

The second picture is from the cited article.

*In principle, this is already enough ...* - writes the "Lunar Program".

Everything! Professional cameraman Konovalov is defeated! Amateurs have won!

To help the "Lunar Program" I will add to these words a few more "murderous" facts.

The most powerful lighting devices are DIGi (intense burning arc) - devices in which the light source is not an incandescent lamp, but an electric arc that occurs between two carbon electrodes (analogous to a luminous arc when welding metals). These coals burn out quickly, in about 50 minutes. They need to be changed all the time. Now imagine that the lighting fixture is placed under the ceiling. How high will you have to pull powerful electric cables for lighting fixtures? And how do you change the burning coals every hour?

But how to simulate the change in the rise of the Sun while on the Moon? Install an external lift (for slightly raising and lowering the lighting fixture)? With the help of it, it would be possible to recreate in the pavilion the change in the height of the sun, which occurs on the moon during 20-30 hours of astronauts stay there. So what?

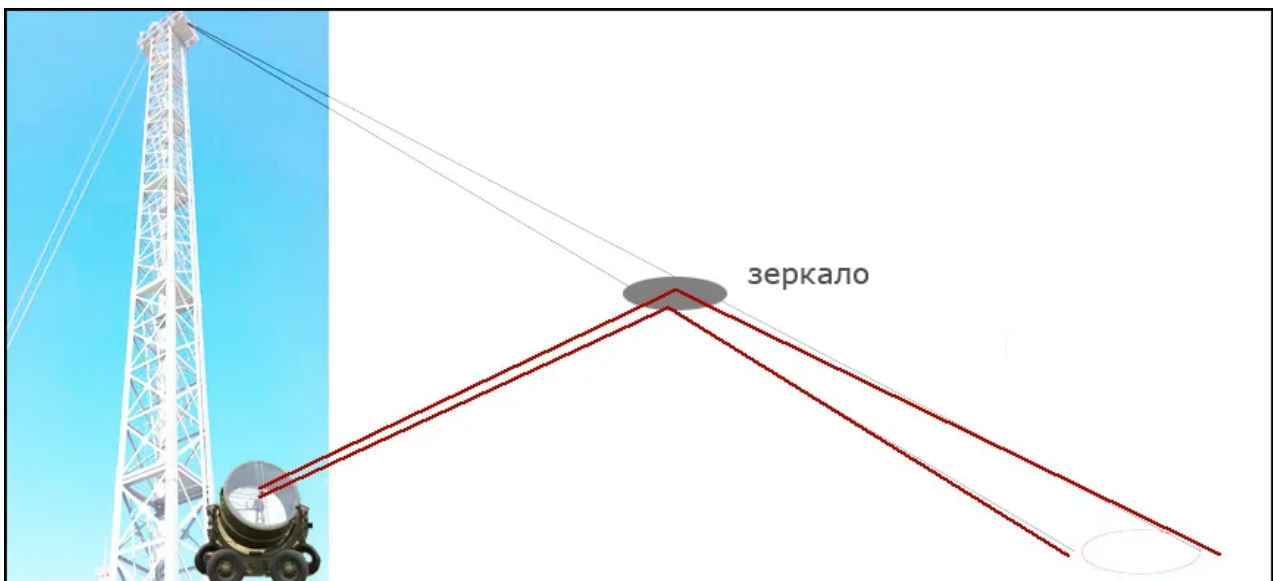
And if we consider that it is necessary to obtain a stream of more or less parallel rays in the frame, then the lighting device must be moved even further. Now, judging by the figure, the length of the red rays (from the lighting device to the ground) is about 40 meters. At this distance, at least, there should be a lighting fixture!

Everything! An unsolvable tangle of complexities! It is impossible to repeat the "moon shot" in the pavilion! - the "Lunar Program" is sure of this, because it has no idea how a movie on a space theme is made in Hollywood.

"Lunar Program" believes that the lighting unit **necessarily** to be the ceiling. This is their main mistake!

Filmmakers would not be filmmakers if they had not found an elegant solution to such a "technically impossible" task.

It is not necessary to raise the lighting fixture itself to that height. He can stay on the ground, more precisely, on the floor of the pavilion. And upstairs, to the ceiling of the pavilion, you only need to raise a mirror.

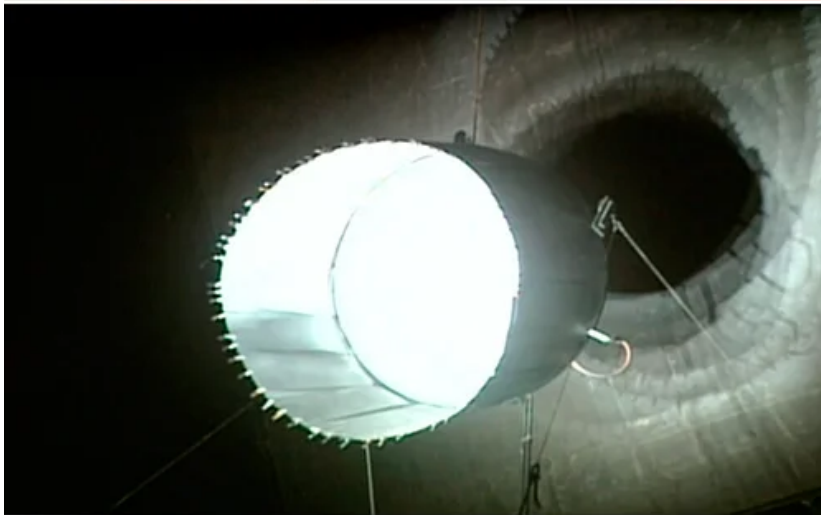


Simulate the light of the sun with a light on the ground.

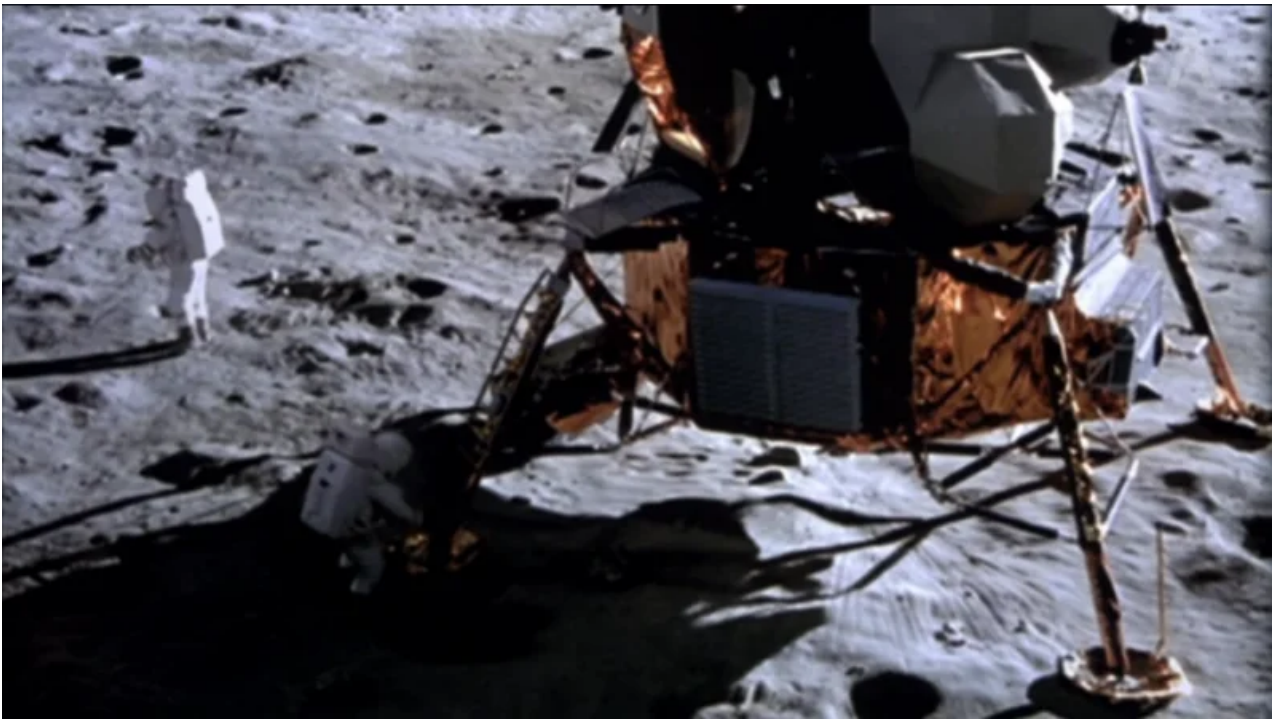
With this design, the height of the pavilion is reduced by 2-3 times, and the length of the path from the lighting device to the shooting location remains the same. With this distance, you can easily get the effect of parallel rays and parallel shadows. And most importantly, when the giant lighting fixture is on the ground, it is easy to operate.

Moreover, instead of one lighting fixture, you can put several fixtures at once. For example, in the 12-episode film "From the Earth to the Moon" (1998, produced and starred by Tom Hanks), 20 lighting fixtures with 10 kW xenon lamps created an imitation of the light of the sun in the pavilion. located next to each other. The light beams were directed into a spherical mirror, 2 meters in diameter, located under the ceiling of the pavilion.





Creation of the light of the sun "on the moon" in the pavilion with the help of 20 lighting devices and a spherical mirror under the ceiling.

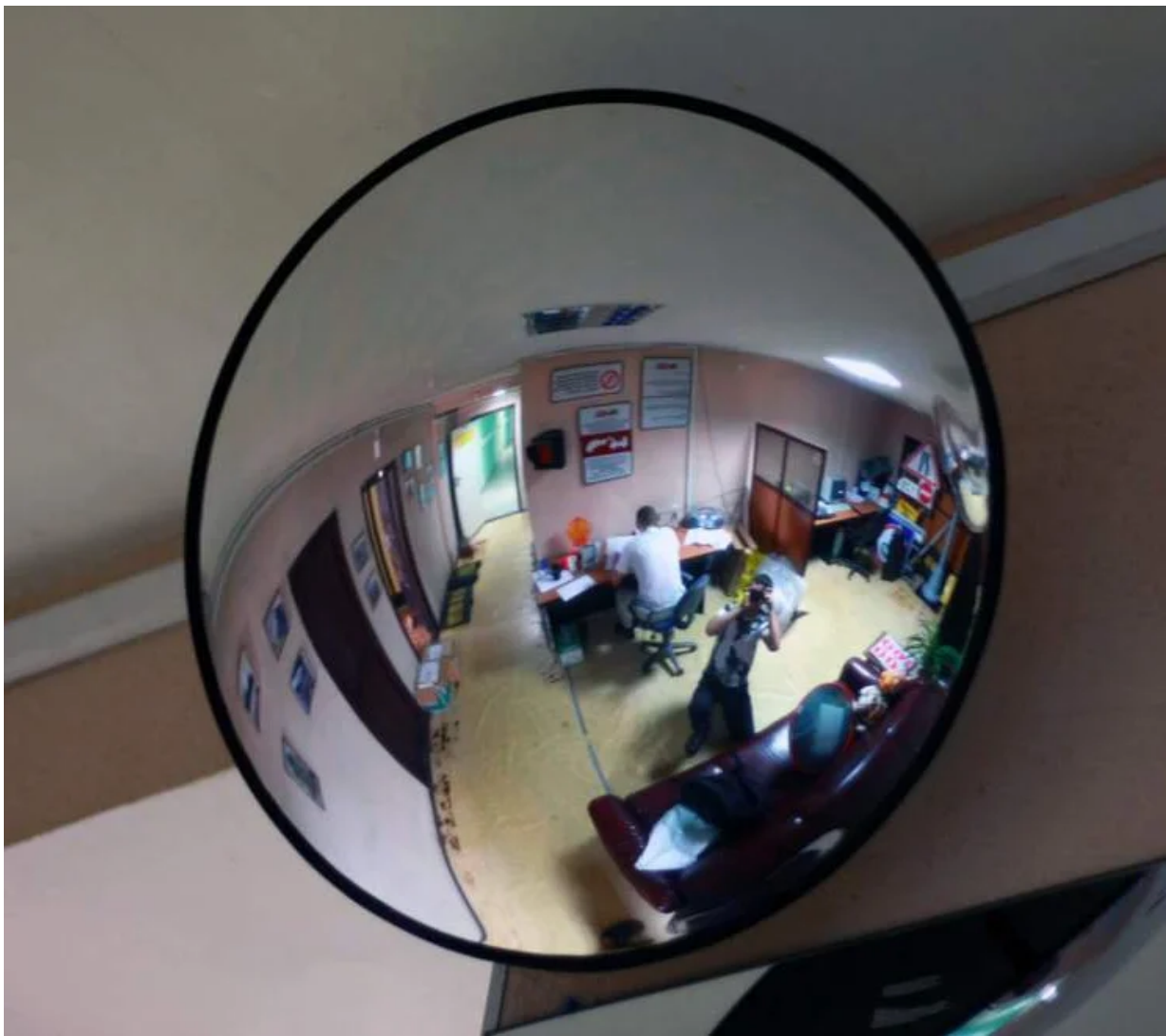


Shot from the film "From Earth to the Moon"



Still from the film "From Earth to the Moon", 1998

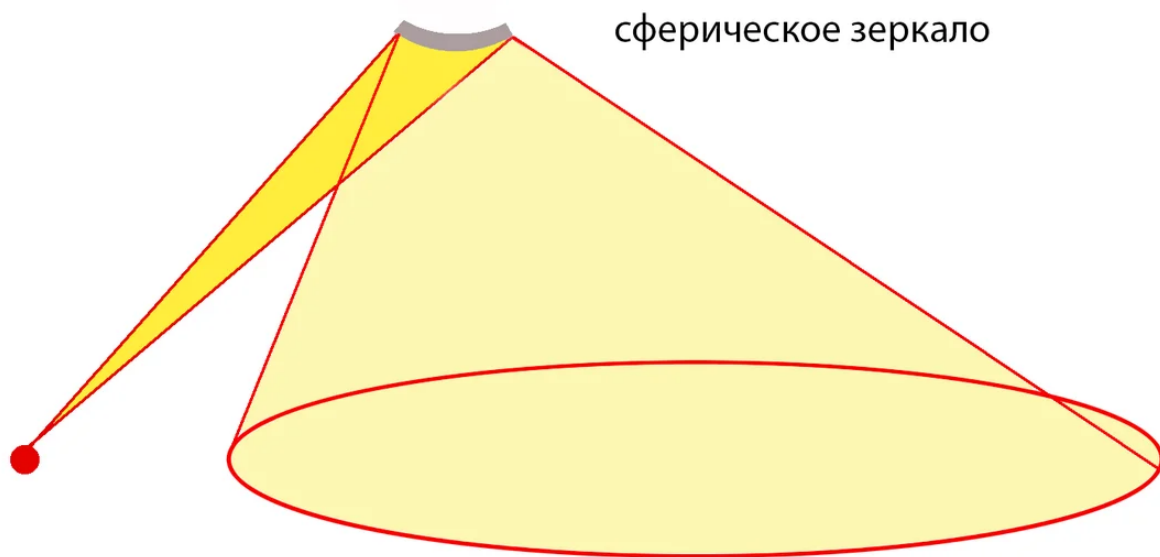
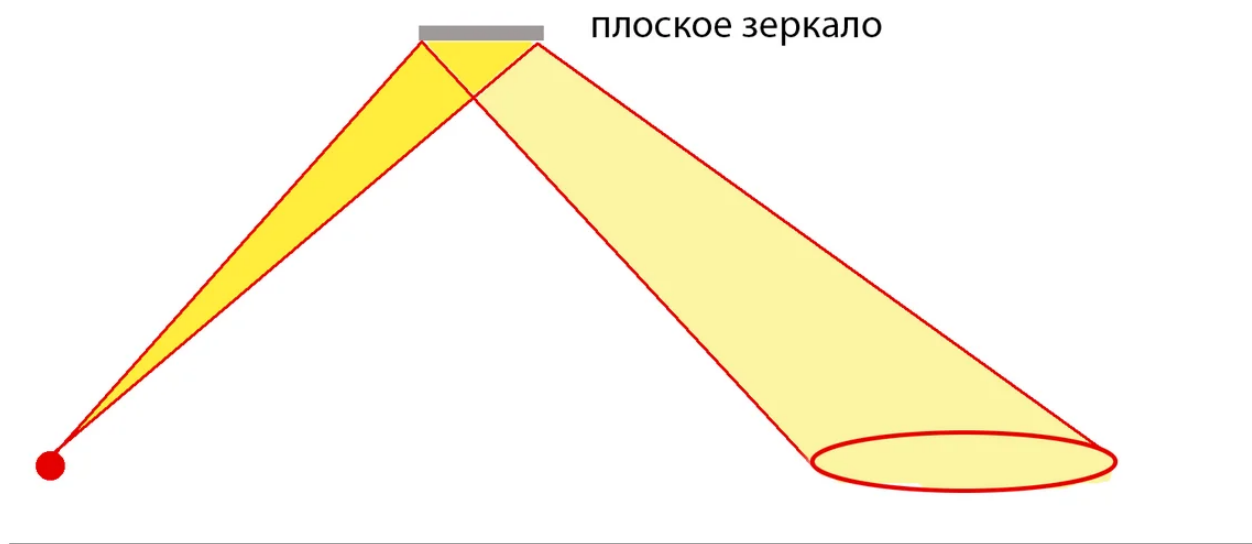
I hope you have noticed that the mirror under the ceiling of the pavilion was not flat, but spherical. Spherical mirrors can cover a larger area than flat mirrors.



Reflection in a convex spherical mirror.

If you direct the beam of the searchlight into a spherical mirror, then the volume of space that is visible in the mirror can be illuminated by one light source directed at it.





The use of a convex spherical mirror allows a larger area to be illuminated.

Here is the solution to how you can illuminate a huge pavilion with one light source. This will create the feeling that the light comes from one point.

Now take the picture that the "Lunar Program" led, where the ceiling height is 31 meters. Place a mirror in the path of the rays, and lower the light source itself to the floor. And instead of 31 meters, the ceiling will be at a height of 10-12 meters. The most common cinema pavilion.

THE MYTH that a pavilion with an incredibly high ceiling is needed to create a "moon shot" and it is impossible to build it is DESTROYED!

Go to any major cinema, at least IMAX at the "River Station" in Moscow. There is only a screen as high as a 7-storey building (as it is written in the advertisement).



Cinema at the "River Station".

Ceiling height of 20 meters is the most common occurrence.

And also the "Lunar Program" is offended:

- And we have already measured the height of the light source in some ancient publications. The height was also gigantic. **But then there was no answer from the cameraman.**

Why did the "Lunar Program" suddenly think that I had to answer all their amateurish scribbling? And even this article I am writing not for them, but for those who want to figure out how the sun effect can be easily recreated in the pavilion.

What is the next argument Konovalov is trying to refute the "Lunar Program"? Panning angle that the camera can rotate? Now we will talk about this. I have long wanted to tell my subscribers how circular panoramas are shot in space-themed movies.

\*

Cameraman L. Konovalov was with you.

More coming soon!

